

DEVAL L. PATRICK Governor

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# COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS DEPARTMENT OF ENVIRONMENTAL PROTECTION

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IAN A. BOWLES Secretary

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# **DRAFT**

AMENDMENTS TO REGULATIONS 310 CMR 7.00 FOR THE CONTROL OF AIR POLLUTION IN THE

BERKSHIRE AIR POLLUTION CONTROL DISTRICT
PIONEER VALLEY AIR POLLUTION CONTROL DISTRICT
MERRIMACK VALLEY AIR POLLUTION CONTROL DISTRICT
METROPOLITAN BOSTON AIR POLLUTION CONTROL DISTRICT
CENTRAL MASSACHUSETTS AIR POLLUTION CONTROL DISTRICT
SOUTHEASTERN MASSACHUSETTS AIR POLLUTION CONTROL DISTRICT

STATUTORY AUTHORITY M.G.L. c. 111, Sections 142A through 142N

March 2007

AMEND 310 CMR 7.00, the list of cities and towns to reflect the regional boundary changes:

City/Town	Region		District	
Athol	$\mathbf{c}$	$\underline{\mathbf{W}}$	CM	
Braintree	NE		MB	
Canton	NE	<u>S</u>	MB	
Cohasset	NE	<u>S</u>	MB	
Franklin	SE	<u>S</u> <u>S</u> <u>S</u> <u>C</u> <u>W</u> <u>S</u> <u>S</u> <u>S</u> <u>C</u> <u>C</u> <u>C</u> <u>S</u>	SM	
Hardwick	$\mathbf{c}$	$\underline{\mathbf{W}}$	CM	
Hingham	NE	<u>S</u>	MB	
Holbrook	NE	<u>S</u>	MB	
Hull	NE	<u>S</u>	MB	
Medfield	NE	<u>C</u>	MB	
Millis	NE	<u>C</u>	MB	
Norfolk	NE	<u>C</u>	MB	
Norwood	NE	<u>S</u>	MB	
Petersham	$\mathbf{c}$	$\underline{\mathbf{W}}$	CM	
Randolph	NE	$\frac{\underline{W}}{\underline{S}}$	MB	
Royalston	$\mathbf{c}$	<u>W</u> <u>N</u> <u>S</u>	CM	
Tyngsborough	$\mathbf{c}$	<u>N</u>	MV	
Walpole	NE	<u>S</u>	MB	
Warren	$\mathbf{c}$	$\underline{\mathbf{W}}$	CM	
Westford	$\mathbf{c}$	<u>W</u> <u>N</u> <u>S</u>	MV	
Weymouth	NE	<u>S</u>	MB	

## AMEND 7.02(2)(b)33. to correct a typo

33. <u>Actions that Contravene an Issued Plan Approval.</u> Except as provided in 310 CMR 7.02(2)(b)3233a. and b., the construction, substantial reconstruction, or alteration of a facility

## AMEND 310 CMR 7.02(8)(c), (d), (e) and (h)

- (8) Emission Limitations.
- . . .
- (c) Emission Limitations for Existing Facilities. Existing facilities must comply with the applicable requirements of 310 CMR 7.02(8)(d) through (g) unless subject to more stringent requirements that have been established by plan approval, state regulation or federal requirement (NSPS or NESHAP) as applicable. Under 310 CMR 7.02(8)(c) through (i)(g), an existing facility is any facility or emission unit that was in operation on or before June 1, 1972 and has not been constructed, substantially reconstructed or altered since that date (See also Definition of Existing Facility in 310 CMR 7.00). Stationary combustion turbines and stationary reciprocating engines are not subject to the Emission limits in Table 4, 5 and 6.
- (d) <u>Maximum Particulate Emission Limits in Areas of Critical Concern</u>. Existing facilities in the communities listed in 310 CMR 7.02: *Table 3* shall, at a minimum, meet the particulate emission limits in Table 4 unless subject to a more stringent emission limit in a plan approval, state regulation or federal program (*e.g.* NSPS or NESHAP), as applicable. <u>Stationary combustion turbines and stationary reciprocating engines are not subject to the Emission limits in Table 4, 5 and 6.</u>

(e) <u>Maximum Particulate Emission Rate:</u> All Other Communities. In communities other than those listed in 310 CMR 7.02: *Table 3*, existing facilities shall, at minimum, meet the particulate emission limits in 310 CMR 7.02: *Table 5* unless subject to more stringent emission limits as applicable in a plan approval, <u>state</u> regulation or federal program (NSPS or NESHAP). <u>Stationary combustion turbines and stationary reciprocating engines are not subject to the Emission limits in Table 4, 5 and 6.</u>

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(h) <u>Particulate Emission Limitations for New Wood and Fossil Fuel Utilization Facilities. New facilities shall, at a minimum, comply with the particulate emission limits in 310 CMR 7.02: Table 6 unless subject to more stringent emission limits as applicable in a plan approval, state regulation or federal program (NSPS or NESHAP). Stationary combustion turbines and stationary reciprocating engines are not subject to the Emission limits in Table 4, 5 and 6.</u>

# AMEND: 310 CMR 7.03(15)(a)

- (15) Non-heatset Offset Lithographic Printing. On or after July 1, 1992 construction, substantial reconstruction or alteration of any non-heatset offset lithographic printing press, except such presses present at a facility subject to 310 CMR7.26 (20), utilizing materials containing VOCs-containing compounds, including but not limited to, printing inks, overprint coatings, makeup solvents, fountain solution additives, alcohol and cleanup solutions, complying with the following criteria applicable performance standards set forth in 310 CMR 7.03(15)(b) and (15)(c), and shall be subject to the limits and reporting requirements in either 310 CMR 7.03(15)(a)1 or (a)2 below.
  - (a) 1. Except as provided in 310 CMR 7.03(15)(a) 2; this standard is applicable only where the The total facility, including the new or modified printing press, will shall not have a usage use less than 670 gallons per month-rates of all materials containing VOCs -containing compounds, including, but not limited to, printing inks, overprint coatings, makeup solvents, fountain additives, alcohol and clean up solution, exceeding 670 gallons per calendar month, or alternatively, its, an emission rate of. This usage includes VOC containing compounds used in all printing and non printing operations at the facility, including, but not limited to, non heat set offset lithographic printing presses 2. As an alternative determination of applicability, this standard is applicable only where the total facility, including the new or modified printing press, will not have a facility wide emission rate of VOC exceeding shall be less than 2.5 tons of VOC per calendar month. This emission rate shall include emissions from all printing and non-printing operations at the facility, including, but not limited to, non-heatset offset lithographic printing presses. The owner\operator is subject to the reporting requirements of 310 CMR 7.12.
    - 2. The total facility, including the new or modified printing press, shall use less than 2,000 gallons per 12-month rolling period of all organic material-containing compounds (includes VOC), or, alternatively, shall emit an emission rate less than 10 tons of organic material (includes VOC), per 12-month rolling period. This emission rate shall include emissions from all printing and non-printing operations at the facility, including, but not limited to, non-heatset offset lithographic printing presses. The owner/operator is not subject to the reporting requirements of 310 CMR 7.12 unless otherwise required.

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# AMEND 310 CMR 7.03(16)(a):

- (16) <u>Paint Spray Booths.</u> Construction, substantial reconstruction or alteration of any paint spray booth <u>utilizing coatings</u>, thinners, reducers and cleanup solutions, and complying with the <u>applicable performance standard of 310 CMR 7.03(16)(b)-(l) and shall be subject to the limits and reporting requirements in either 310 CMR 7.03(16)(a)1 or (a)2 below following criteria:..</u>
  - (a) 1. Except as provided for 310 CMR 7.03(16)(a)2., this standard is applicable only where the total facility, including the new or modified paint spray booth, will not have a The total facility, including the new or modified paint spray booth, shall use -wideusage rate of all VOC containing compounds, including, but not limited to, coating, thinners, reducer and cleanup solutions, exceedingless than 670 gallons per calendar month of all VOC-containing materials, or alternatively, has an emission rate of less than 2.5 tons of VOC per calendar month. This usage includes all coating operations at the facility.

    2. As an alternative determination of applicability, this standard is applicable only where the total facility, including the new or modified paint spray booth, will not have a facility-wide emission rate of VOC exceeding 2.5 tons per calendar month. This emission rate includes all coating operations at the facility. -The owner/operator is subject to the reporting requirements of 310 CMR 7.12.
    - 2. The total facility, including the new or modified paint spray booth, shall use less than 2,000 gallons per 12-month rolling period of any organic material containing compounds (includes VOC), or alternatively, has an emission rate less than 10 tons of organic material (includes VOC) per 12-month rolling period. This emission rate includes all coating operations at the facility. The owner/operator is not subject to the reporting requirements of 310 CMR 7.12 unless otherwise required.

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# AMEND 310 CMR 7.03(19), 7.03(19)(a)1 and 2

- (19) <u>Flexographic, Gravure, Letterpress and Screen Printing</u>. On and after May 1, 1998, construction, substantial reconstruction, or alteration of any flexographic, gravure, letterpress, or screen printing press at a facility not subject to 310 CMR 7.26(20) through (29), utilizing VOC-containing compounds, including but not limited to, printing inks and overprint coating, alcohol, makeup solvents, and cleanup solutions complying with the applicable performance standards in 310 CMR 7.26(25) and 310 CMR 7.26(26) and with shall be subject to the limits and reporting requirements in either 310 CMR 7.03(19)(a)1 or (a)2 below.the following criteria: .
  - (a) 1. Except as provided in 310 CMR 7.03(19)(a)2., this standard is applicable only where the The total facility, including the new or modified printing press, and non-printing operations at the facility will not have a usage of rate shall use less than 670 gallons per calendar month of all VOC-containing compounds, including, but not limited to, printing inks, overprint coatings, alcohol, makeup solven ts, and cleaning solutions, exceeding 670 gallons per month. This usage rate shall include all VOC containing compounds used in all printing and non-printing operations at the facility.or, alternatively, its an emission rate shall be less than 2.5 tons of VOC per calendar month.

    2. As an alternative determination of applicability, this standard is applicable only where the total facility, including the new or modified printing press, will not have a facility wide emission rate of VOC exceeding 2.5 tons per calendar month. This emission rate

shall include emissions from all printing and non-printing operations at the facility. The owner/operator is subject to the reporting requirements of 310 CMR 7.12.

2. The total facility, including the new or modified printing press, and non-printing operations at the facility, shall use less than 2,000 gallons per 12-month rolling period of all organic material-containing compounds (includes VOC) or alternatively, its an emission rate shall be less than 10 tons of organic material (includes VOC) per 12-month rolling period. The owner/operator is not subject to the reporting requirements of 310 CMR 7.12 unless otherwise required.

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# AMEND 310 CMR 7.03(25)(b) 1

(25) Biotechnology Surface Disinfection Processes.

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- (b) Surface disinfection processes shall comply with the following criteria:
  - 1. The total facility-wide actual emissions, including new or modified surface disinfection processes, shall not exceed the limits and reporting requirements in either 310 CMR 7.03(25)(b)1.a. or 1.b.
    - a. 15 tons of volatile organic compounds (VOC) per 12-month rolling period. This VOC emission limitation includes all process operations at the facility. In addition, facility-wide actual emissions of VOC shall not exceed 2.5 tons per calendar month. The owner\operator is subject to the reporting requirements of 310 CMR 7.12.
    - b. Less than t<del>Ten</del> tons of organic material (includes VOC) per 12-month rolling period. This organic material emission limitation includes all process operations at the facility. The owner\operator is not subject to the reporting requirements of 310 CMR 7.12 unless otherwise required.

## AMEND 310 CMR 7.04(4)

- (4) U Inspection, Maintenance and Testing.
  - (a) on On and after December 31, 1977, no person shall cause, suffer, allow, or permit the operation of any fossil fuel utilization facility rated by the Department as having an energy input capacity equal to or greater than 3,000,000 Btu per hour unless said facility has been inspected and maintained in accordance with the manufacturers recommendations and tested for efficient operation at least once in each calendar year. The results of said inspection, maintenance, and testing and the date upon which it was performed shall be recorded and posted conspicuously on or near the facility. Unless otherwise required, 310 CMR 7.04(4)(a) shall not apply to stationary combustion turbines and stationary reciprocating engines.

# AMEND 310 CMR 7.12(1)(a) and (b)

# 7.12: U Source Registration

- (1) Applicability.
  - (a) Source Registration is required of any person owning, operating or controlling a facility if said facility:

...

- 7. Is required to file Source Registration as a condition of a plan approval or operates under a Restricted Emission Status (RES) pursuant to 310 CMR 7.02(9) or 7.02(10) issued since January 1, 1990. Facilities required by a plan approval, issued prior to January 1, 1990, to submit annual source registration are no longer required to do so unless said facility meets one of the other conditions for registration in 310 CMR 7.12; or a more recent Department approval requires Source Registration ; or 8. Who receives a request for Source Registration from the Department or 9. Any person owning, operating or controlling a facility subject to 310 CMR 7.00: Appendix C.
- (b) Any person owning, operating or controlling a facility that becomes subject to annual reporting by meeting one of the criteria in 310 CMR 7.12(1)(a) and that was not previously subject to Source Registration reporting shall contact the Department by January 31-to request Source Registration forms.

## AMEND 310 CMR 7.12(2)(a).

- (2) Schedule.
  - (a) By April 15 of each year, Source Registration shall be <u>signed and</u> submitted to the Department by the <u>person owning or controlling Responsible Official of</u>:
    - 1. A facility required to obtain an operating permit pursuant to 310 CMR 7.00: *Appendix C*;
    - 2. A facility having a RES pursuant to 310 CMR 7.02(9);
    - 3. [RESERVE] A facility that elected to comply with a facility wide emission cap pursuant to 310 CMR 7.02(11)(e);
    - 4. A facility with actual emissions of NOX or VOC equal to or greater than 25 tons per year:
    - 5. A facility that emits an air contaminant subject to NESHAPS or a Maximum Achievable Control Technology (MACT) standard defined at 40 CFR Part 61 and Part 63, for which the Department has received delegation from EPA; and or
    - 6. A facility that is required, as a condition of a plan approval issued since January 1, 1990, to file Source Registration annually.

ADD: 7.20 [RESERVED]

# AMEND 310 CMR 7.26(30)-(36)

- (30) <u>U Boilers Applicability</u>. Except as provided in 310 CMR 7.26(30)(a) and (b), the provisions of 310 CMR 7.26(30) through (37) apply to any person who owns or operates a boiler installed on or after September 14, 2001, with a heat input rating equal to or greater than 10,000,000 Btu per hour but less than 40,000,000 Btu per hour. Complying with the criteria in 310 CMR 7.26(30) through (37) does not relieve the owner or operator from his or her applicability to the requirements of 40 CFR 60 Subpart Dc Standards of Performance for Small Industrial Commercial Steam Generating Units or 40 CFR 63 Subpart DDDDD National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters.
  - (a) The provisions of 310 CMR 7.26(30) through (37) do not apply to an any person who is an owner or operator of a facility:
    - 1. who has secured required to obtain an operating permit pursuant to 310 CMR 7.00: Appendix C.; however, 310 CMR 7.02(4) or (5) do apply, Any person who installed a boiler in accordance with 310 CMR 7.26(30) shall continue to comply with 310 CMR 7.26(31) and (33) through (37) even if the facility later becomes subject to 310 CMR 7.00: Appendix C. or
    - (b)2. An owner or operator of a facility who proposes to install a wood fuel-fired boiler with a heat input rating equal to or greater than 10,000,000 Btu per hour but less than 40,000,000 Btu per hour is not subject to the provisions of 310 CMR 7.26(30) through (37) for the wood fuel fired boiler; however, 310 CMR 7.02(5) does apply.
  - 3. who installs a temporary boiler in accordance with 310 CMR 7.03(23). (b) If the installation of the boiler(s) causes the facility to be subject to 310 CMR7.00 Appendix C, or to exceed an emission cap contained in a written Department approval, or notification pursuant to 310 CMR 7.02(11), the person who is an owner or operator of the facility shall, as applicable:
  - file either a Limited Plan Application pursuant to 310 CMR 7.02(4) or
     Comprehensive Plan Application pursuant to 310CMR 7.02(5) to increase the facility-wide cap or to establish an emission cap to avoid applicability to Non-Attainment Review at 310 CMR 7.00 Appendix A, Operating Permit and Compliance Program at 310 CMR 7.00: Appendix C or federal PSD(40 CFR 52.21) or
  - comply with 310 CMR 7.26(30)-(37) and comply with the requirements of Non-Attainment Review at 310 CMR 7.00 Appendix A, the Operating Permit and Compliance Program at Appendix C and federal PSD (40 CFR 52.21) as applicable; or
  - 3. comply with 310 CMR 7.26(30)-(37) and submit a notification establishing an emission cap under 310 CMR 7.02(11), or a higher emissions cap under 310 CMR 7.02(11) where the installation would otherwise violate an emissions cap pursuant to 310 CMR 7.02(11);or
  - 4. comply with 310 CMR 7.26(30)-(37) and comply with the requirements of 310 CMR 7.02(10)Modification of a Restricted Emission Status (RES).
  - (c) Any person who is the owner/operator of a boiler installed in accordance with 310 CMR 7.26(30) shall continue to comply with 310 CMR 7.26(31) and (33) through (37) even if the facility later becomes subject to 310 CMR 7.00: *Appendix C*.

(31) <u>Definitions</u>. Terms used in 310 CMR 7.26(30)-(37) are defined in 310 CMR 7.00 or in 310 CMR 7.26(31). Where a term is defined in both 310 CMR 7.00 and in 310 CMR 7.26(31), the definition in 310 CMR 7.26(31) is applicable.

<u>DISTILLATE FUEL OIL</u> for the purposes of 310 CMR 7.26(30) means fuel oil that complies with the specifications for fuel oil numbers 1 or 2 as defined by the American Society for Testing and Materials in ASTM D396-98, "Standard Specification for Fuel Oil" dated September 1998 and has a sulfur content not to exceed 0.05% by weight <u>or D6751 for bio-diesel and has a sulfur content not to exceed 0.0015% by weight.</u>

ULTRA-LOW SULFUR DISTILLATE FUEL OIL means any fuel oil or other fuel, excluding used oil fuel and hazardous waste fuel, which complies with the applicable U.S. Environmental Protection Agency sulfur limits for fuel pursuant to 40 CFR 80.29, 40 CFR 80.500, and 40 CFR 80.520(a) and (b) as in effect on January 18,2001 and either complies with the specifications for fuel oil numbers 1 or 2 as defined by the American Society for Testing and Materials (ASTM) in ASTM D-396-98 or D6751 for bio-diesel.

## (32) Certification.

(a) <u>Prior to installation, a person who is Aan</u> owner or operator of a boiler subject to 310 CMR 7.26(30) shall certify to the <u>Department</u>, in compliance with 310 CMR 70.00, that the boiler is in compliance with 310 CMR 7.26(30) through (37).

## (33) Fuel of Use/Emission Limitations.

## (a) Fuel of Use -

- 1. Only natural gas and distillate fuel oil(s) may be used, as specified in 310 CMR 7.0026(33)(a)2 through (a)4. Used oil fuel and Hazardous Waste Fuel as defined under M.G.L. c.21C that meet the sulfur limit for USLD, cannot be burned in boilers subject to 310 CMR 7.26(30).
- 2. NATURAL GAS Prior to July 1, 2007:
  - a. All a boilers subject to 310 CMR 7.26(30) shall burn natural gas as the primary fuel of use where the boiler is located on a property adjacent to a street or sidewalk underlain by a natural gas pipeline having sufficient pressure and capacity to supply natural gas to the boiler.
  - b. <u>a natural gas fired boiler may burn Ddistillate fuel oil may be burned</u> for a maximum of 90 180 days per calendar year. Total annual distillate fuel use (gallons/year) is calculated by multiplying 90 days/yr x 24 hours/day x maximum firing rate (gals/hour) per boiler. Records must be established and maintained up to date in accordance with 310 CMR 7.26(36) Recordkeeping and Reporting.
- 3. DISTILLATE Prior to July 1, 2007, All a boilers subject to 310 CMR 7.26(30) may burn distillate fuel oil as the primary fuel of use when conditions for natural gas use, as specified in 310 CMR 7.26(33)(a)2, cannot reasonably be met. as determined by the Department in accordance with these regulations.
- 4. On and after July 1, 2007, a boiler subject to 310 CMR 7.26(30) shall burn only natural gas and/or ultra-low sulfur distillate fuel oil.

(b) Emission Limitations. Each boiler shall comply with the following emission limitations in pounds per million **BTUBtu** heat input for the fuel of use.

POLLUTANT	Fuel of Use	Emission limitation (lbs. per million Btu)
Nitrogen Oxides	Natural Gas	0.0350
	Distillate Fuel Oil and	0.150
	<u>Ultra-low Sulfur Distillate</u>	
	Fuel Oil	
Particulate Matter	Natural Gas	0.010
	Distillate Fuel Oil and	0.020
	<u>Ultra-low Sulfur Distillate</u>	
	Fuel Oil	
Carbon Monoxide	Natural Gas	0.080
	Distillate Fuel Oil and	0.080
	<u>Ultra-low Sulfur Distillate</u>	
	Fuel Oil	
Volatile Organic	Natural Gas	0.030
Compounds	Distillate Fuel Oil and	0.030
	<u>Ultra-low Sulfur Distillate</u>	
	Fuel Oil	

(c) The sulfur dioxide emissions are limited by the sulfur content of the distillate fuel oil. The sulfur content of the distillate fuel oil is limited to 0.05% by weight and the sulfur content of the ULSD fuel oil is limited to 0.0015% by weight.

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# (34) Operational Requirements.

- (a) The boiler and appurtenances shall be operated in accordance with the manufacturer's standard operating and maintenance procedures.
- (b) A boiler tune-up shall be performed annually. <u>for boilers that primarily burn natural</u> gas, and twice a year for boilers that burn distillate fuel oil as the primary fuel.

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# (35) Stack Requirements.

(a) Minimum stack height shall be 1.5 times the height of the building on which the stack is located. If the stack height is (1) lower than 1.5 times the building height or (2) lower than the height of an adjacent structure, an EPA Guideline air quality model shall be run to document that the operation of the applicable boiler(s) will not cause National Ambient Air Quality Standards exceedance. The air quality model documentation must be retained on site for as long as the boiler(s) are is operational.

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## (36) Recordkeeping and Reporting

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(e) The person who is the owner or operator of an applicable boiler is subject to the reporting requirements of 310 CMR 7.12 U Source Registration.